Arizona Department of Health Services

Clinician Fact Sheet: Influenza 2005-2006

Epidemiology

- **Human** disease is caused by influenza A or influenza B
- Ongoing minor antigenic changes require yearly vaccination in the fall
- Knowing the currently circulating strain aids in decisions regarding antiviral treatment and prophylaxis

Clinical Presentation

- High fever, chills, prostration, muscle aches, sore throat, coryza, cough; at times, also vomiting and diarrhea

Differential Diagnosis

- Febrile respiratory illnesses such as bacterial pneumonia, mycoplasma, adenovirus, avian influenza (e.g. influenza A H5N1), and SARS

Laboratory

- Rapid testing of nasopharyngeal swabs for influenza
- Consider NP swab for respiratory viral culture (if positive, allows for further typing of isolate)
- Do not order routine viral **culture** if avian influenza is suspected

Infection control

- Droplet precautions (mask within 3-6 feet)
- Routine standard precautions and good handwashing before & after patient contact

Treatment & Prophylaxis

- Antivirals shorten the course of illness when given within the first 1-2 days of influenza symptoms
- CDC recommends against the use of amantadine & rimantadine for the 2005-2006 season

	Amantadine (Symmetrel®)	**Rimantadine** (Flumadine®)	**Oseltamivir** (Tamiflu®)	**Zanamivir** (Relenza®)
Effective for Influenza A	**Not recommended for 2005-2006 season**		**Yes**	**Yes**
Effective for Influenza B	**No**	**No**	**Yes**	**Yes**
Mode	**Oral**	**Oral**	**Oral**	**Inhaled**
Treatment	**≥ 1 y.o.**	**≥ 13 y.o.**	**≥ 1 y.o.**	**≥ 7 y.o.**
Prophylaxis	**≥ 1 y.o.**	**≥ 1 y.o.**	**≥ 1 y.o.**	**Not licensed**

Follow CDC's recommendations for ages and contraindications

- Don't use smaller doses than recommended
- Only use LAIV (Flumist™) in healthy people ages 5 years-49 years
- Persons receiving LAIV should avoid close contact with severely immunosuppresed people for 7 days
- Contraindications to inactivated influenza vaccine or LAIV
  - Anaphylactic allergy to eggs
  - Previous Guillain-Barré syndrome during the 6 weeks following a previous influenza vaccine

Remember Pneumovax® or Prevnar® pneumococcal vaccine for high-risk individuals.

Update 19 Jan 2006

Influenza Vaccine Recommendations for 2005-2006 season

Inactivated intramuscular shot [Multiple manufacturers]:

1) Ages ≥ 50 y.o.
2) All children ages 6 mo.-23 mo.
3) Household contacts and out-of-home caretakers of infants < age 6 mo.
4) Ages 2 y.o.-64 y.o. with a chronic medical conditions (e.g. heart disease, lung disease, asthma, diabetes, kidney disease, immunosuppression, etc.)
5) Pregnant during influenza season.
6) Children age 6 mo.-18 y.o. on chronic aspirin therapy.
7) Health care workers (HCW) with direct patient care.
8) Residents in nursing home or long-term care facility.
9) **Anyone** wishing to reduce their risk of influenza.

Live attenuated influenza vaccine (LAIV) [Flumist™]:

- Healthy, nonpregnant people ages 5 y.o. through 49 y.o., including close contacts of infants and many health care workers

Pediatric pointers

- Children ages 5 years-8 years old receiving any influenza vaccine for the first time need two doses of vaccine.
  - Two inactivated shots should be spaced ≥ 4 weeks apart
  - Two LAIV doses should be separated by 6-10 weeks
- Notify local or county health department for pediatric influenza deaths.

Staphylococcal and MRSA disease associated with influenza

- MRSA is becoming a community-acquired infection
- Coagulase positive staphylococcus secondary respiratory infections are more likely with influenza
- During the 2003-2004 season, CDC reported severe illness and death associated with influenza and MRSA

➢ Physicians caring for patients who have influenza and worsening respiratory status requiring IV antibiotics should consider using **vancomycin** for staphylococcal coverage until culture results are available and/or clinical improvement occurs

- Many oral antibiotics do not cover MRSA
- Oral antibiotics that may be effective against MRSA
  - Trimethoprim-sulfamethoxazole
    - Poor against *Streptococcus pneumoniae*
    - Avoid in pregnancy
  - Clindamycin (Good against *Streptococcus pneumoniae*)

For More Information

- ADHS website at http://www.azdhs.gov/phs/immun/providersflu.htm
- Centers for Disease Control and Prevention website at www.cdc.gov/flu
- MMWR July 29, 2005 "Treatment and Control of Influenza" at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5408a1.htm
- Recorded ADHS Hotline for the Public: **Metro Phoenix** 602-364-4500
  Statewide 1-800-314-9243